

**AMENDMENTS TO THE ABSTRACT**

Please replace the paragraph beginning at page 45, line 3, with the following rewritten paragraph:

-- A single crystal pulling apparatus for a metal fluoride comprising a crucible provided in a chamber ~~and for filling with~~ a molten solution of a single crystal manufacturing material, a melting heater provided to surround the crucible, a vertically movable single crystal pulling bar ~~including for attaching~~ a seed crystal on a tip ~~and thereof for~~ coming in contact with the molten solution of the single crystal manufacturing material filled in the crucible, a heat insulating wall provided in the chamber to surround at least a peripheral side portion of a single crystal pulling region in an upper part of the crucible, a ceiling board for closing an opening portion of an upper end in an upper part of the heat insulating wall, and a single crystal pulling chamber surrounded by the heat insulating wall and the ceiling board, wherein the ceiling board is provided with at least an inserting hole for inserting the single crystal pulling bar, and wherein a coefficient of thermal conductivity in a direction of a thickness of the ceiling board is 1000 to 50000 W/m<sup>2</sup> K. --